

NEW AND LITTLE KNOWN NEOTROPICAL HISTERIDAE (COLEOPTERA)

BY RUPERT L. WENZEL AND HENRY S. DYBAS

The Histeridae of the Neotropical region have been little studied, the greater part of the described species being known only from the original descriptions and scattered records. Undescribed forms are to be found in almost any collection of appreciable size, as, for example, the one here dealt with, which includes forty-four species, of which twenty-one are new. The material treated in this paper has been assembled from several sources: (1) A collection made by Dr. Charles H. Seevers and Henry S. Dybas in Colombia in 1938; (2) a few specimens collected by Dr. Seevers in Mexico during the summer of 1936; (3) one specimen from the collection of the United States National Museum; (4) a small series collected by Dr. Eliot C. Williams at Barro Colorado Island, Panama Canal Zone, during the summer of 1938; and (5) specimens collected by Karl P. Schmidt on the Leon Mandel-Field Museum Expedition to Guatemala in 1933-34. Certain genera probably containing more than 50 per cent of undescribed species have been almost entirely disregarded in this study, because inadequate descriptions make proper assignment of names impossible at this time.

Acknowledgment is due the individuals and the officials of the institutions mentioned above for their kind co-operation in making material available for study.

Since little has been published on the terminology employed in the descriptions of Histeridae, illustrations (pl. XIII; pl. XIV, fig. 1) are included to clarify the names applied by the writers to the striae commonly found in many of the Histeridae. It is to be remembered that many of the species do not conform at all closely in striation to the type illustrated, but may possess a complement of striae which is the result of a varying extent of loss and reduction or, in some cases, of duplication and addition. In many genera the homologies of certain striae are difficult to determine, particularly when considerable reduction has taken place. The figures are not to be construed as a reconstruction of a primitive generalized type of striation.

All measurements of total length were made from the anterior angles of the pronotum to the tip of the pygidium; width was measured at the broadest part of the body, this nearly always being

at, or behind, the humeri. For proportions of length to width of the pronotum, the measurements of length were made along the median line; of width, across the posterior angles.

Subfamily Hololeptinae

Eutidium oblitum Marseul

Phylloma oblitum Marseul, Ann. Soc. Ent. France, (3), 1, p. 194, pl. 5, fig. 2, 1853—Colombia (Carthagenia).

Colombia: Villavicencio, Meta Intendencia, one specimen from under bark, July 11, 1938 (Dybas).

Hololepta (Hololepta) bidentata Marseul

Hololepta bidentata Marseul, Ann. Soc. Ent. France, (3), 1, p. 156, pl. 4, fig. 14, 1853—Venezuela (Caracas).

Colombia: Villavicencio, four males, three females, from under bark, July 25, 1938 (Dybas).

In describing this species, Marseul stated that the males do not have the anterior angles of the pronotum emarginate. Only one of the males of our series agrees with this description; the other three have these angles slightly but distinctly emarginate, as in *H. colombiana* Marseul.

Hololepta (Hololepta) bogotana Marseul

Hololepta bogotana Marseul, Ann. Soc. Ent. France, (3), 1, p. 184, pl. 4, fig. 26, 1853—Guatemala (Lake Izabal) and Venezuela (Caracas).

Colombia: Villavicencio, one female, two males, July 11, 1938 (Dybas).

Hololepta (Leionota) devia Marseul

Leionota devia Marseul, Ann. Soc. Ent. France, (3), 1, p. 211, pl. 5, fig. 9, 1853—Brazil and French Guiana (Cayenne).

Colombia: Villavicencio, one male, July 25, 1938 (Dybas).

The specimen at hand answers well to the description of this species but does not have the sides of the pronotum nearly so angulate as figured by Marseul. Since Marseul's figures are often exaggerated, there is little doubt as to the identity of the specimen.

Hololepta (Leionota) cobanensis sp. nov.

Type from Coban, Guatemala. In the collection of Field Museum of Natural History. Female. Collected March 22, 1934, by Karl P. Schmidt.

Description.—Form oblong-subparallel, feebly convex. Color black, shining. Mandibles without teeth. Head sparsely punctulate;

frontal stria consisting of two disconnected transverse strioles, longitudinal interocular stria short, well impressed; transverse supra-orbital stria not visible; preocular tooth well developed.

Pronotal width double the median length, sides feebly arcuate on basal two-thirds, strongly arcuate and convergent on apical third; basal margin bisinuate. Marginal pronotal stria present on each lateral fifth along the basal margin, complete along the sides, deeply impressed around the anterior angles and interrupted on each side behind the eyes, a median detached portion being present along the middle. Sides with a few moderate punctures near the margin; disk sparsely, very finely punctulate.

Elytra together about two-thirds broader than long and nearly two-thirds longer than the pronotum. Epipleura smooth. Sub-humeral stria present from near base to apical fifth, very coarse and sulciform at middle. First dorsal stria well impressed, present on basal third; second dorsal stria a little more than half the length of the first and with an appendix which extends from apical fifth to near the margin.

Propygidium sparsely, moderately coarsely punctate on each side, apex feebly bifoveolate. Pygidium rather coarsely, densely, umbilicately punctate on basal four-fifths, apical fifth sparsely punctulate. A coarse, sulciform marginal stria is present on each lateral fifth of the basal margin and extends nearly to apex along the lateral margins.

Prosternum sparsely punctulate, constricted at middle, the median width less than half the basal. Prosternal lobe somewhat produced, longest at middle. Mesosternum with a marginal stria on each side around the anterior angles.

Anterior tibiae four-dentate, the two apical teeth being the largest and approximate, the basal tooth smallest. Middle tibiae four-dentate, the teeth evenly spaced, the basal tooth minute. Posterior tibiae with three teeth on the superior ridge; inferior ridge non-dentate.

Measurements.—Length 6.7, width 4.02 mm.

Remarks.—The pygidial characters and elytral striation seem to indicate that this species is most closely allied to *H. (Leionota) confusa* Marseul, but it may be distinguished from that species by its less coarsely punctate propygidium, the presence of a short interocular stria on each side of the head, its transversely bistrate front, and its much smaller size. The character of the marginal pronotal stria along the apical margin seems to be unique in this subgenus.

Hololepta (Leionota) confusa Marseul

Leionota confusa Marseul, Ann. Soc. Ent. France, (3), 1, p. 205, pl. 5, fig. 3, 1853—Mexico.

Guatemala: Coban, a male, March 22, 1934 (Schmidt); Volcan Tajumulco, a female found in bromeliads at seven to nine thousand feet elevation, March 16, 1934 (Schmidt).

The female is doubtfully associated with the male. Both specimens differ from Marseul's description and figure in that they have the pygidium margined as in the preceding new species rather than completely margined apically; possibly they may represent a new species.

Subfamily **Trypanaeinae****Coptotrophis proboscideus** Fabricius

Bostrichus proboscideus Fabricius, Syst. Eleuth., 2, p. 385, 1801.

Trypanaeus proboscideus Marseul, Ann. Soc. Ent. France, (3), 4, p. 128, pl. 2, figs. 21, 21g, 1856.

Trypanaeus carthagenus Marseul, Ann. Soc. Ent. France, (3), 5, p. 402, pl. 11, fig. 21, 1857 (male).

Colombia: Villavicencio, one male and one female from scolytid beetle burrows, July 25, 1938 (Dybas).

Subfamily **Abraeinae****Bacanius hamatus** Lewis

Bacanius hamatus Lewis, Biol. Centr.-Amer., Coleop., 2, pt. 1, p. 237, pl. 7, fig. 12, 1888—Guatemala (San Geronimo).

Panama Canal Zone: Barro Colorado Island, one specimen from leaf mold, July 9, 1939 (Williams).

Bacanius scalptus Lewis

Bacanius scalptus Lewis, Biol. Centr.-Amer., Coleop., 2, pt. 1, p. 237, pl. 7, fig. 10, 1888—Guatemala (El Tumbador, Zapote, El Reposo) and Cuba.

Colombia: Villavicencio, six specimens, July 11, 1938 (SeEVERS and Dybas); Puerto Berrio, Antioquia, thirteen specimens, August 16, 1938 (Dybas); Puerto Salgar, Cundinamarca, nine specimens, July 31, 1938 (Dybas).

Mexico: Cordoba, Vera Cruz, two specimens, July 26, 1936 (SeEVERS).

This species has also been collected in Brazil.

Bacanius subcarinatus sp. nov.

Type from Cordoba, Vera Cruz, Mexico. In the collection of Field Museum of Natural History. Sex undetermined. Collected July 20, 1936, by Charles H. SeEVERS.

Paratypes.—Two specimens, same locality and date as the type, one in the collection of Rupert L. Wenzel, one in the collection of Edward S. Ross.

Description.—Form oval, strongly convex. Color varying from rather pale testaceous to reddish brown, shining. Head without striae; vertex sparsely, microscopically punctate; epistoma with fine, strong, sparse, setigerous punctures, hairs very short, inconspicuous.

Pronotum nearly twice as broad as long, sides straight, strongly convergent, basal margin broadly, evenly arcuate. Marginal stria complete, strongly impressed. Disk with moderate, strong, sparse punctures, these becoming microscopic laterally. Submarginal antescutellar row of punctures not present.

Scutellum not visible. Elytra together nearly as long as broad, sides strongly arcuate and (behind the middle) strongly convergent to suture; very sparsely, microscopically punctulate throughout, the punctures considerably stronger and coarser along the suture on basal half. Epipleura with a fine subcariniform stria. Marginal stria fine, subcariniform, extending from base to apex, close to the epipleural stria. First dorsal stria complete, fine, subcariniform, extending from base around apical angle to suture.

Pygidium with a few microscopic punctures.

Prosternal keel broad, about as long as broad, sides straight; the lateral marginal prosternal striae join the marginal stria of the prosternal lobe on each side; carinal striae not well impressed, straight, extending a little beyond the middle. Prosternal lobe very short, microscopically punctulate. Mesosternum with anterior margin rather broadly subsinuate, nearly truncate at middle, the margin oblique each side of the truncated portion; marginal mesosternal stria broadly interrupted at middle; disk with a few shallow punctures. Mesometasternal stria absent (suture visible as a dark line). Metasternum sparsely, shallowly, coarsely punctate, a small area at middle sometimes nearly smooth; lateral metasternal stria absent.

Anterior tibiae expanded, outer margin strongly arcuate on basal third, straight and nearly parallel to the inner margin on middle third, with a very distinct short tooth one-third from apex, the margin obliquely convergent thence to apex; the outer margin has a number of extremely short spinules on basal two-thirds which are visible only under very high magnification. Tarsi of all the legs with five tarsomeres.

Measurements.—Length 0.8–0.95, width 0.6–0.7 mm.

Remarks.—This species is apparently most closely allied to *B. humicola* Marseul and *B. ferrugineus* Bickhardt, but differs from the former in its punctation and in the possession of a complete dorsal stria in addition to the marginal elytral stria; from *B. ferrugineus*, *subcarinatus* differs in its rather coarsely, shallowly, sparsely punctate metasternum.

The following provisional key may be of aid in identifying the known neotropical *Bacanius*:

1. Form broadly oval (as in *Anapleus*), strongly convex; a well-defined, crenate, hamiform sutural stria present, this extending from basal fourth to a little beyond the middle, thence abruptly angulate and arcuately, outwardly recurving to middle. *B. hamatus* Lewis; Guatemala, Panama.
- 1a. Form more narrowly oval, strongly convex, sutural stria absent. 2
2. Elytra coarsely, closely, deeply punctate, the punctures connected by grooves; first dorsal stria arching across the elytral base and recurving at about one-third from suture. *B. scalptus* Lewis; Mexico to Brazil, Cuba.
- 2a. Elytra for the most part minutely punctate, the punctures sparse and never connected by short grooves; first dorsal stria, when present, not arching across the elytral base. 3
3. Metasternum smooth, impunctate (or at most remotely punctulate). 4
- 3a. Metasternum rather coarsely, sparsely, shallowly punctate; elytral punctures coarsest on basal half along the suture. *B. subcarinatus* sp. nov.; Mexico.
4. Elytra very finely, sparsely punctate, the punctures noticeably more distinct near apex, dorsal elytral stria abbreviated at basal third; prosternal lobe minutely, rugulose punctate. *B. convergens* Schmidt (1896, p. 65); Brazil.
- 4a. Elytra very finely, sparsely, rather uniformly punctate, "subhumeral stria" complete; prosternal lobe with a few scattered, minute punctures.
B. ferrugineus Bickhardt (1918, p. 286); Guadeloupe.
- 4b. Surface smooth, impunctate. . *B. humicola* Marseul (1856, p. 570); Venezuela.

The terminology of the striae demands explanation. The writers have followed Schmidt in referring to the innermost stria of the elytral flank as the first dorsal stria; it is this stria which arches across the elytral base in *B. punctiformis* and *B. scalptus* and which has been called the sublateral stria by Casey; by Marseul, it has apparently been at times referred to as the marginal and at times as the subhumeral, although a "true" subhumeral stria has not been seen in any species examined and possibly the marginal stria has been referred to by that term in some descriptions. Examination of types is necessary to separate more definitely the last three species of the key.

Acritus exiguus Erichson

Abraeus exiguus Erichson, Jahrb. Ins., 1, p. 208, 1834.

Acritus exiguus Marseul, Ann. Soc. Ent. France, (3), 4, p. 603, pl. 23, fig. 3, 1856.

Mexico: Cordoba, Vera Cruz, four specimens, July 20, 1936 (SeEVERS).

The writers know of no other record of this species from the Neotropical region.

***Acritus tuberculatus* sp. nov.**

Type from Villavicencio, Colombia. In the collection of Field Museum of Natural History. Male. Collected July 11, 1938, by Henry S. Dybas.

Allotype.—Same data as the type. A female in the collection of Rupert L. Wenzel.

Paratypes.—Fifty-seven specimens, same data as the type and allotype. Four each are to be deposited in the collections of Field Museum of Natural History, Mr. Edward S. Ross, and Mr. Henry S. Dybas; two each are to be deposited in the collections of the British Museum (Natural History), the United States National Museum, the American Museum of Natural History, the Museum of Comparative Zoology, the California Academy of Sciences, and the Carnegie Museum; the remainder are in the collection of Rupert L. Wenzel.

Description.—Form broadly oval, subdepressed. Color black with a tinge of brown, strongly shining. Head strongly, finely, sparsely punctate, without striae.

Pronotum twice as broad as long, sides nearly straight and feebly convergent on basal two-thirds, more strongly convergent and arcuate on apical third; basal margin broadly bisinuate and moderately coarsely, crenately punctate. Marginal pronotal stria well impressed, complete laterally and around the anterior angles, interrupted behind the head for a distance of about half the width of the head. Surface strongly (not deeply) punctate throughout, the punctures separated by two to four times their diameters and becoming finer laterally and at apex. A submarginal antescutellar row of punctures is not present.

Elytra together a little broader than long (6.6:5.3), nearly twice as long as, and at humeri distinctly broader than, the pronotum; sides evenly arcuate on basal half, arcuate and convergent on apical half. Epipleura smooth, without striae. Marginal elytral stria rather deeply impressed, punctate, extending from base to apex. Dorsal striae represented laterally near base by one to three vague, oblique impressions. Flanks sparsely punctulate; disks more coarsely punctate than pronotal disk, the punctures oval, nearly the same size as those along the posterior pronotal margin, and separated by about one to two times their diameter; along the suture the punctures are more elongate and at middle longitudinally confluent.

Propygidium rather coarsely, sparsely punctate. Pygidium similarly punctate on basal half, the punctures a little finer on apical half.

Prosternum moderately broad, a little more than twice as long as broad, basal width equal to the apical, width at middle three-fourths that of the base, sides evenly arcuate; carinal striae arcuate, diverging basally and apically and united anteriorly on each side with the apical marginal stria; prosternal keel with a few strong, moderate punctures and possessing a small tubercle near the middle. Mesosternum with the anterior margin broadly, feebly sinuate, marginal stria broadly interrupted at middle, sides with a very few rather coarse punctures. Meso-metasternal stria rather coarsely, crenately punctate, and feebly arcuate, often narrowly interrupted on each side and not joined with the marginal stria. Metasternum with a narrow median area nearly smooth, punctate laterally, the punctures becoming very coarse, subaciculate and subconfluent, but abruptly changing on the elevated sides to round, coarse, and sparse.

All the tibiae narrow, slightly widened apically (not dilated), finely spinulose. Tarsi of anterior and middle legs with five tarsomeres, those of the posterior legs with four; ultimate tarsomeres bearing two claws.

Measurements.—Length 0.9–1.0, width 0.6–0.7 mm.

Remarks.—This species is related to *Acritus exiguus* Erichson but may be separated from that species by its more broadly oval form and the minute but distinct tubercle on the prosternal keel.

***Acritus punctisternus* sp. nov.**

Type from Villavicencio, Colombia. In the collection of Rupert L. Wenzel. Sex undetermined. Collected July 11, 1938, by Charles H. SeEVERS.

Description.—Form oval, strongly convex. Color reddish brown, rather strongly shining. Head without striae; front and epistoma finely, very sparsely punctate, the punctures strong and on the epistoma setigerous, the hairs being short and inconspicuous.

Pronotum nearly twice as broad as long, sides nearly straight and not very strongly convergent on basal two-thirds, a little more distinctly arcuate on apical third; basal margin broadly bisinuate. Marginal pronotal stria complete, well impressed. Surface sparsely, finely, strongly, deeply punctate at middle, the punctures becoming minute laterally. Submarginal antescutellar line composed of punctures (these about twice the size of the discal punctures), arcuate on middle third and about one-sixth removed from basal margin, nearly approximate to the margin on each lateral third of its extent.

Elytra together nearly as long as broad (6.25:6.75), about as long as pronotum is broad, sides arcuate on basal fourth, thence straight nearly to apex. Marginal stria subcariniform, moderately punctate, extending from base to apex. Flanks sparsely punctulate, upper surface very finely, sparsely punctate, the punctures simple baso-laterad but becoming aciculate baso-mesiad and apically, the punctures a little more closely placed and more distinctly aciculate apically along the suture. A short, feebly impressed, rudimentary discal stria is present on lateral third near the middle.

Propygidium finely alutaceous, finely, very sparsely punctate. Pygidium sparsely, minutely punctulate.

Prosternal keel moderately broad, one-half longer than wide, sides feebly arcuate, base feebly emarginate; carinal striae well impressed, transversely united along basal margin, nearly parallel on basal half, slightly divergent apically and united with the deeply impressed transverse apical marginal stria of the prosternum; disk of keel with a few very fine scattered punctures.

Anterior mesosternal margin outwardly, obtusely angulate, the median portion fitting into the feeble emargination of the prosternum. Marginal mesosternal stria feebly arcuate, complete, subcariniform, well impressed. Mesosternal disk sparsely, deeply, coarsely punctate, slightly tumid, and set off from the metasternum and the rest of the mesosternum. Meso-metasternal stria straight, rather coarsely crenate. Metasternal disk feebly, minutely punctulate, the sides with a few coarser, scattered punctures. Anterior tibiae narrow, about twice as wide near apex as at base (not dilated), all the tibiae finely spinulose. Tarsi of the anterior and middle legs with five tarsomeres, those of the posterior legs with four tarsomeres.

Measurements.—Length 0.95, width 0.7 mm.

Remarks.—From other *Acritus* (*sensu stricto*), which have a submarginal row of pronotal punctures and an outwardly, obtusely angulate anterior mesosternal margin, this species may be particularly distinguished by the rather coarsely punctate and tumid mesosternum.

Acritus ignobilis Lewis

Bacanius ignobilis Lewis, Biol. Centr.-Amer. Coleop., 2, pt. 1, p. 238, pl. 7, fig. 2, 1888—Panama (Volcan de Chiriqui).

Colombia: Puerto Berrio, two specimens collected in cow dung, July 5, 1938; Puerto Salgar, two specimens taken in a débris pile outside a nest of *Atta* sp., July 31, 1938 (Dybas).

***Acritus (Aeletes) simpliculus* Marseul**

Acritus simpliculus Marseul, Ann. Soc. Ent. France, (3), 4, p. 616, pl. 14, fig. 15, 1856—Venezuela (Caracas).

Colombia: Villavicencio, four examples from under bark, July 25, 1938 (Dybas).

This species has heretofore been included in *Acritus* (*sensu stricto*), presumably because Marseul described the scutellum as "a *peine distinct*," though it is not at all visible in our specimens; the scutellum was similarly described by Marseul for *Acritus atomarius* Aubé, which is recognized as an *Aeletes*. The marginal mesosternal stria, described as interrupted in front, is complete in one specimen and continued by punctures in another. Under very high magnification the elytral punctures are seen to be feebly aciculate rather than simple. The pygidium has a distinct punctiform marginal stria, laterally and apically.

***Acritus (Aeletes) rugulosus* Marseul**

Acritus rugulosus Marseul, Ann. Soc. Ent. France, (3), 4, p. 617, pl. 14, fig. 16, 1856—Venezuela (Caracas).

Colombia: Puerto Salgar, six specimens, July 11, 1938; Villavicencio, one example from under bark, July 31, 1938 (Dybas).

This species has formerly also been included in *Acritus* (*sensu stricto*) but belongs in the subgenus *Aeletes*. The elytral punctures on the disks are distinctly aciculate. The pygidium has a very fine marginal stria, laterally and apically.

Subfamily **Dendrophilinae*****Carcinops carinata* sp. nov.**

Type from Puerto Salgar, Colombia. In the collection of Rupert L. Wenzel. Sex undetermined. Collected July 31, 1938, from a rubbish heap outside a nest of leaf-cutting ants (*Atta* sp.) by Henry S. Dybas.

Description.—Form oblong-oval, moderately convex. Color deep brown; surface densely, minutely alutaceous and subopaque throughout, excepting a rather broad median pronotal area which is smooth and rather strongly shining. Head sparsely punctulate, supra-orbital stria present, finely cariniform, continued anteriorly on each side a little beyond the eyes.

Pronotum nearly twice as broad as long, sides nearly straight and feebly convergent on basal two-thirds, strongly arcuate and convergent apically. Marginal pronotal stria finely cariniform, except behind the head, complete. Disk sparsely punctulate on each side.

Elytra together about as broad as long, sides feebly arcuate from base to apex. Marginal epipleural stria finely subcariniform, complete, marginal elytral stria finely cariniform, complete, bent at middle. External subhumeral stria punctate, its outer edge finely carinate, extending from basal sixth to apical third; internal subhumeral stria with the outer edge strongly carinate, extending from base to apical fourth. Dorsal striae one to five complete, their outer edges strongly carinate, the fifth arching at base; sutural stria extending a little beyond the middle. Pygidia very sparsely punctulate.

Prosternal keel slightly narrowed at middle, the carinal striae finely cariniform. Mesosternum with the anterior margin shallowly emarginate, the marginal stria subcariniform, complete, joined on each side with the coarse, strongly cariniform, lateral metasternal stria. Meso-metasternal suture impressed.

Outer margin of anterior tibiae strongly arcuate on basal half, finely serrulate, with a tooth at middle and another near apex, the interval between the teeth emarginate. Outer edge of middle and posterior tibiae with a marginal row of three moderately coarse spinules and several very fine spinules, and a submarginal row of very fine spinules.

Measurements.—Length 1.83, width 1.22 mm.

Remarks.—*C. carinata* can be distinguished from all other described species of the genus by the character of its elytral striae, the outer margins of which are strongly carinate.

Carcinops biinterrupta sp. nov. (pl. XIV, fig. 2)

Type from Villavicencio, Colombia. In the collection of Field Museum of Natural History. Male. Collected from under rotten bark, July 25, 1938, by Henry S. Dybas.

Allotype.—Same data as the type. A female in the collection of Rupert L. Wenzel.

Paratypes.—Nineteen specimens, same data as the type; five specimens, same locality as the type, July 11, 1938; two each in the collections of Field Museum of Natural History, Edward S. Ross, and Henry S. Dybas.

Description.—Form oblong-subparallel, rather strongly depressed, upper surface feebly convex. Color black, shining. Stria of head very fine, feeble, sometimes interrupted in front; front very finely, sparsely punctulate with somewhat coarser fine punctures intermingled.

Pronotum a little more than twice as broad as long, sides nearly straight basally, rather strongly convergent on apical third. Marginal stria complete, well impressed. Basal margin deeply crenate. Antescutellar puncture round, coarse, deeply impressed. Surface distinctly, not densely, punctulate throughout, with sparse, coarser punctures intermingled in a rather broad area on each side.

Elytra together about as broad as long, at humeri slightly broader than pronotum; sides feebly arcuate at base and apex, nearly straight at middle. Marginal epipleural stria complete, finely subcariniform. Marginal elytral stria complete, well impressed. External subhumeral usually absent, often represented by a few disconnected punctures near middle; internal subhumeral represented by a short, coarse impression at base and by a well-impressed finely punctate stria on middle third. Dorsal striae crenately punctate; one to four complete, one to three coarsely impressed at base; fifth dorsal stria extending to basal fourth or third, sutural stria extending a little beyond the middle. Surface punctulate, with a few coarser punctures intermingled near the apical ends of the striae.

Propygidium and pygidium punctulate, with sparse, coarser punctures intermingled.

Prosternum finely, sparsely punctate, between the coxae about one-eighth as wide as the pronotum, the striae well impressed, slightly sinuate at middle and usually transversely joined at base; prosternal lobe as long as the prosternum, very finely, sparsely punctate, without a marginal stria. Anterior margin of mesosternum broadly, feebly emarginate, disk sparsely, indistinctly punctulate; marginal stria deeply impressed, interrupted on each side at the anterior angle, the median detached portion finely subcariniform, its ends distinctly recurving posteriorly. Inner lateral metasternal stria coarsely subcariniform, continuous with the marginal mesosternal stria and extending to the posterior coxae. Outer lateral metasternal stria joined at base to the inner, bowed outwardly and approaching it again at apex. First abdominal sternum within the coxae with a stria on each side extending from basal to apical margin and another just lateral to it which extends from each coxa to apical margin.

Outer margin of anterior tibiae with two teeth, one near middle, the other near apex, the interval between them arcuately emarginate; basally the outer margin is finely serrulate. Outer margin of middle tibiae with two rather stout spinules, one at middle, the other subapical. Posterior tibiae with a subapical tooth.

Measurements.—Length 1.62–2.00, width 0.95–1.1 mm.

Remarks.—*C. biinterrupta* may be distinguished from its near ally, *C. tantilla* Marseul, by its unusual marginal mesosternal stria, its usually smaller and narrower form, and by the presence of two sizes of punctures on the front of the head (evenly punctulate in *tantilla*); only the first of these characters is adequate for the separation of the two species without comparative material.

***Carcinops tantilla* Marseul**

Carcinops tantillus Marseul, Ann. Soc. Ent. France, (3), 3, p. 93, pl. 8, fig. 6, 1855—Venezuela (Caracas).

Colombia: Villavicencio, one hundred specimens, July 11, 1938, and seven specimens, July 25, 1938; Puerto Berrio, six specimens, August 16, 1938 (Dybas).

The internal subhumeral stria of this species is usually abbreviated at about apical fifth or sixth and broadly interrupted basally, though the apical portion may be connected by a row of punctures to the short, coarse, basal portion. A very short dash lateral to the internal subhumeral and just apical to the middle is often present (external subhumeral).

***Carcinops misella* Marseul**

Carcinops misellus Marseul, Ann. Soc. Ent. France, (3), 3, p. 95, pl. 8, fig. 8, 1855—Guatemala.

Colombia: Puerto Salgar, five examples, July 31, 1938; Puerto Berrio, six specimens, August 16, 1938; Villavicencio, fourteen specimens, July 11, 1938 (Seevers and Dybas); three specimens, July 25, 1938 (Dybas).

***Carcinops miserula* Marseul**

Carcinops miserulus Marseul, Ann. Soc. Ent. France, (3), 3, p. 14, 1862; idem, pl. 9, fig. 15, 1861—Colombia.

Colombia: Puerto Salgar, one specimen, July 31, 1938 (Dybas).

The last two species are separated chiefly on the basis of form, *C. misella* having the sides of the elytra distinctly arcuate and the elytra together distinctly broader than the pronotum, while *C. miserula* is of a more narrow form, the elytra together being hardly noticeably broader than the pronotum, and with the sides nearly straight. In addition, *C. misella*, with rare exceptions, has a very short external subhumeral stria near the middle of the elytra just lateral to the inner subhumeral; *C. miserula*, at most, occasionally has a few disconnected punctures representing an external subhumeral.

Subfamily **Histerinae**Tribe **Tribalini****Epierus schmidti** sp. nov.

Type from Playitas, Izabal, Guatemala. In the collection of Field Museum of Natural History. Male. Collected December 20, 1933, by Karl P. Schmidt.

Allotype.—Same data as the type. A female in the collection of Field Museum of Natural History.

Paratypes.—From Volcan Tajumulco, Guatemala; one female in the collection of Field Museum of Natural History, collected February 18, 1934, by Karl P. Schmidt. From Barro Colorado Island, Panama Canal Zone; one male and one female in the collections of Rupert L. Wenzel and Edward S. Ross, respectively, collected from leaf mold, July 25, 1938, by Eliot C. Williams.

Description.—Form oval, rather strongly convex; color dark reddish brown to brownish black, surface strongly shining, smooth or sparsely punctulate throughout. Supraorbital stria of head fine, complete; frontal stria absent; front very shallowly impressed; anterior margin of clypeus at middle with a small, setigerous tubercle in the male. Labrum with four setae.

Pronotum twice as broad as long, sides nearly straight and convergent on basal half, arcuate and more strongly convergent on apical half. Marginal pronotal stria complete, very finely punctate. Disk smooth or microscopically, sparsely punctulate, with a narrow area of sparse, fine punctures on each side. Anterior to the scutellum a hastiform impression extends from the basal margin nearly to the middle of the disk; the apex of the impression is not very distinct.

Elytra together very slightly broader than long, one-fifth broader than pronotum, sides evenly arcuate, apices sharply truncate, surface microscopically, sparsely punctulate. Epipleura with scattered moderate punctures. Marginal epipleural and marginal elytral striae complete, finely subcariniform; external subhumeral stria absent; inner subhumeral sometimes present on basal fifth. Oblique humeral stria very finely impressed. Dorsal striae one to three complete, not very distinctly punctate; fourth dorsal stria variable, usually nearly complete, abbreviated at basal fourth in one paratype; fifth dorsal stria varying from present on apical fifth to present on apical half; sutural stria abbreviated on basal fourth.

Propygidium deeply, sparsely, moderately punctate. Pygidium with a semicircular sulcus which is marginal along the sides but

about one-fifth removed from the apical margin, thus dividing the pygidium into two parts, of which the small apical portion is smooth, the larger basal portion sparsely, rather coarsely, deeply punctate, excepting a somewhat swollen, smooth area at middle which is much more distinctly gibbous in the female; pygidial punctures coarsest and sometimes confluent laterally.

Prosternal keel rather narrow, twice as wide at base as at middle; carinal striae fine, strongly divergent on basal two-fifths, subparallel apically and extending to the prosternal lobe, the latter with an uninterrupted apical marginal stria. Mesosternum with the anterior margin feebly bisinuate, the marginal stria very fine, complete at middle, not extending posteriorly to the meso-metasternal stria, which is deep, coarsely subcariniform, strongly arcuate, and continuous with the lateral metasternal stria. Metasternum with a few moderate, sparse punctures on the elevated sides. Meso- and metapleurites with coarse, sparse punctures, these sometimes confluent.

Anterior tibiae with the outer edge evenly arcuate, finely multispinulose. Middle and posterior tibiae biserially spinulose, the spinules of the posterior tibiae being very fine, short, and sparsely placed.

Measurements.—Length 1.8–2.0, width 1.3–1.45 mm.

Remarks.—*E. schmidti* is allied to *E. hastatus* Marseul by virtue of its hastiform pronotal impression, but differs from that species in possessing a sulcate pygidium and less densely punctate pygidia.

***Epierus brasiliense* Tarsia in Curia (= *Plagiogramma*)**

Plagiogramma brasiliense Tarsia in Curia, Ann. Mus. Zool. Univ. Napoli, n.s., 6, No. 15, p. 1, 1935.

Plagiogramma brasiliense is without doubt an *Epierus* of the group to which *E. schmidti* belongs, but is more closely allied to *E. coproides* Marseul and *E. epulo* Marseul, and may possibly be identical with the latter. Tarsia in Curia placed *Plagiogramma* in the subfamily Sapriniinae but his own figure clearly shows the well-developed broad prosternal lobe characteristic of the Tribalini.

Tribe Histerini

The following new genus, *Phelisteroides*, is erected to include *Pseudister pygidialis* Lewis, *P. propygidialis* Hinton, and three new species. All of these are closely related and possess in common a very distinct, rather deep, marginal pygidial sulcus and a rather unusual prosternal structure, the prosternal keel being narrowly

triangular with the striae convergent, straight, and united anteriorly in a narrow, rounded arch. *Phelisteroides* must tentatively be placed in the tribe Histerini because of its emarginate anterior mesosternal margin, despite the fact that study of the genitalia shows the species to be more closely related to *Phelister*.

Phelisteroides gen. nov.

Type *Phelisteroides fungicolus* sp. nov.

Description.—Form oblong-oval, moderately convex, elytra somewhat depressed along the suture. Head with frontal and supra-orbital striae; front shallowly impressed. Antennae with eleven articles, inserted under the margin of the front anterior to the eyes; scape moderately stout, not expanded apically; article two cylindrical, articulated with the distal end of the scape; articles three to eight of the funicle very gradually incrassate; antennal club oval, apparently consisting of three articles which are covered with short pubescence and sparser, longer hairs. Labrum transverse, about twice as broad as long, its anterior margin nearly straight.

Pronotum about twice as broad as long, its anterior margin broadly emarginate. Marginal stria and a single lateral pronotal stria present. Elytra striate. Propygidium transverse, about twice as broad as long, coarsely punctate in all the known forms. Pygidium triangular, densely punctulate with coarser punctures intermingled, and possessing a rather deep marginal sulcus laterally and apically.

Prosternum moderately broad, the keel flat, narrowly triangular, margined by striae which converge and unite in a narrow arch anteriorly and which are usually transversely united at base. Prosternal lobe margined. Mesosternum broadly, shallowly, evenly emarginate anteriorly. Marginal mesosternal stria present, not united with the meso-metasternal stria; the latter stria arcuate and approaching the median portion of the marginal mesosternal stria. First abdominal sternum bistrate on each side medial to the coxae. Femora elongate, not very stout, their sides subparallel.

Anterior tibiae with the inner edge nearly straight, fimbriate, the outer margin strongly arcuate and seven-nine denticulate; tarsal grooves straight, only the inner margins well defined. Middle and posterior tibiae as in *Phelister*, tarsal grooves absent.

Phelisteroides miladae sp. nov. (pl. XIV, fig. 5)

Type from Villavicencio, Colombia. In the collection of Rupert L. Wenzel. Female. Collected July 25, 1938, from under rotten bark, by Henry S. Dybas.

Paratype.—Same data as the type. A female in the collection of Edward S. Ross.

Description.—Form feebly oblong-oval, convex, elytra distinctly depressed along the suture. Color black, shining; legs, mouth parts, and antennae reddish brown. Head with a complete, semicircular, supraorbital stria; frontal stria not joined with supraorbital, slightly interrupted on each side, uninterrupted and inwardly angulate at middle. Front moderately strongly impressed, sparsely punctulate.

Pronotum about twice as broad as long, sides feebly arcuate and nearly parallel on basal half, thence strongly arcuate and convergent to apical angles; anterior margin broadly emarginate, the median portion of the emargination straight, not arcuate; basal margin broadly arcuate. Marginal stria fine, complete. Lateral pronotal stria complete, crenately punctate, strongly recurving around the anterior angles and acutely angulate on each side behind the eyes, the median transverse portion behind the head (between the angulations) very feebly outwardly arcuate. Disk sparsely punctulate throughout, each lateral fifth with rather coarse, elongate punctures.

Elytra together slightly broader than pronotum; surface sparsely punctulate. Marginal elytral stria deep, punctate, extending from base to apex. External subhumeral stria very coarse, subsulciform, slightly abbreviated at basal sixth; internal subhumeral stria represented by a row of poorly connected punctures on a little more than apical third; oblique humeral stria finely impressed, joined basally with the first dorsal stria. Dorsal striae one to four complete, punctate, the outer two somewhat deeper than, and not quite as distinctly crenate as, three and four; the latter stria feebly inwardly arcuate at base; the fifth dorsal and sutural striae shallower than the others and possessing very strongly crenate margins; the fifth present on a little less than apical half, and represented by a coarse puncture at base; sutural stria abbreviated at basal third, approaching the suture on apical third.

Propygidium coarsely, densely, umbilicately punctate, the punctures separated by less than half their diameters. Pygidium very finely, exceedingly densely punctate throughout, with moderately coarse punctures intermingled, these latter about half the size of the propygidial punctures and rather dense, separated by about one to two times their diameters; marginal sulcus regular, evenly arcuate, inner margin crenate.

Prosternum as in generic description, the striae subjoined transversely at base, keel impunctate; lateral and approximate to the

carinal stria on each side at middle is a very short subcariniform lateral stria which feebly diverges and ascends anteriorly; prosternal lobe with a strong, complete, marginal stria, surface impunctate excepting a few moderately coarse punctures laterally near the suture.

Marginal mesosternal stria complete, joined on each side with a coarse, transversely, deeply arcuate stria behind the middle coxa which extends to the mesepimeral-metasternal suture. Meso-metasternal stria feebly crenate, anteriorly arcuate, departing half-way from the meso-metasternal suture to the marginal mesosternal stria and joining the lateral metasternal stria which extends nearly to the hind coxa. The metasternum indistinctly punctulate medially, but external to the lateral stria, on each side exceedingly coarsely punctate. First abdominal sternum longitudinally bistrate on each side within the coxa, the inner stria extending from basal margin nearly to the apical, the outer present on basal two-thirds.

Anterior tibiae with seven small teeth along the external margin, the basal five evenly spaced, a little more distant from the apical two; apex with two small spurs and fringed with smaller spur-like spinules; on the inferior surface of the anterior tibiae, parallel to, and close to the external margin is a row of short, rather stout spinules. Middle and posterior tibiae biserially spinulose, the marginal row of the hind tibiae consisting of three or four rather widely separated spinules, the submarginal row of two or three more closely placed ones.

Measurements.—Length 3.2–3.4, width 2.0–2.15 mm.

Phelisteroides panamensis sp. nov. (pl. XIV, fig. 4; pl. XV; pl. XVI, figs. 1–3)

Type from Barro Colorado Island, Panama Canal Zone. In the collection of Field Museum of Natural History. Male. Collected from leaf mold, July 19, 1938, by Eliot C. Williams.

Allotype.—Same locality as the type. A female in the collection of Rupert L. Wenzel, collected from leaf mold, July 14, 1938, by Eliot C. Williams.

Paratypes.—Same data as the allotype. Two specimens of undetermined sex, one each in the collections of Field Museum of Natural History and Rupert L. Wenzel. One male, in the collection of Edward S. Ross. One female, same locality as the type, collected July 12, 1938, in the collection of Rupert L. Wenzel. All the paratypes were collected from leaf mold by Eliot C. Williams.

Description.—Form oblong-oval, moderately convex, distinctly depressed along the elytral suture. Color black with a faint tinge of brown, shining; legs, mouth parts, and antennae rufous. Head with supraorbital stria rather broadly interrupted at middle, not joined to the frontal stria, which is slightly abbreviated on each side and nearly straight and uninterrupted at middle. Front sparsely punctulate, broadly, rather shallowly impressed.

Pronotum about twice as broad as long, sides nearly straight and feebly convergent on basal two-thirds, thence more strongly arcuate and convergent to apical angles; anterior margin strongly emarginate, the median portion of the emargination distinctly outwardly arcuate; basal margin broadly arcuate. Marginal pronotal stria complete laterally, absent behind the head (complete in one specimen); lateral pronotal stria finely crenate, present around the anterior angles on each side and recurving behind the eyes, at which point it is narrowly interrupted on each side, the detached median portion being feebly arcuate with its ends strongly curving posteriorly. Surface sparsely punctulate throughout; on each side within the lateral stria is a rather broad area of coarse, elongate punctures.

Elytra together slightly broader than the pronotum, sides distinctly arcuate at base and apex, usually rather straight and feebly convergent on middle half; disks sparsely punctulate. Marginal elytral stria coarse, extending from base to apex. External subhumeral stria fine, crenate, abbreviated on basal third; internal subhumeral stria usually absent, sometimes represented by a few fine, linear punctures on apical third. Dorsal striae one to four well impressed, finely crenate; fifth dorsal extending from apex to a little beyond the middle, represented at base by a well-impressed puncture; sutural stria abbreviated at basal fifth; the fourth, fifth, and sutural striae much more distinctly crenate than the others.

Propygidium coarsely, umbilicately punctate, the punctures coarser at base and separated for the most part by one-half to three-fourths their diameters, the punctures finer at apex; very fine, sparse punctures scattered throughout. Pygidium very finely, shallowly, exceedingly densely punctate throughout, with moderately coarse punctures (about one-half the size of the coarse propygidial punctures) a little more densely placed along the basal margin, elsewhere sparse. Marginal sulcus coarse, deep, its outer margin rather coarsely crenated.

Prosternum as in generic description, the carinal striae fine, subcariniform, united transversely at base; keel nearly flat, micro-

scopically, sparsely punctate; prosternal lobe with a complete, well-impressed marginal stria, its surface sparsely punctulate medially, more coarsely so laterally.

Marginal mesosternal stria fine, joined posteriorly on each side to a coarser, transversely arcuate stria extending on each side behind the coxa to the mesepimeral-metasternal suture. The meso-metasternal stria is fine, crenate, strongly outwardly arcuate on middle two-thirds (subangulate at middle) and approaches the marginal mesosternal stria; laterally it is joined on each side with the fine lateral metasternal stria which extends posteriorly nearly to the hind coxa.

First abdominal sternum bistrate on each side within the hind coxa, the striae finely crenate, the innermost usually extending nearly to the apical margin, the outer usually extending a little beyond the middle and there curved and extending a short distance laterally.

Anterior tibiae with seven to eight small teeth, all the tibiae similar to those of *P. miladae*.

Measurements.—Length 2.65–3.25, width 1.75–1.95 mm.

***Phelisteroides fungicolus* sp. nov.** (pl. XIV, fig. 6)

Type from Puerto Salgar, Colombia. In the collection of Field Museum of Natural History. Female. Collected July 31, 1938, by Henry S. Dybas (from fungus).

Paratypes.—Same data as the type. Three specimens of undetermined sex, two in the collection of Rupert L. Wenzel, one in the collection of Edward S. Ross.

Description.—Form oblong-oval, elytra feebly depressed along the suture. Color black, shining; legs, mouth parts, and antennae rufous. Head with supraorbital stria present at middle only, rather broadly interrupted on each side within the eyes or represented there by disconnected punctures; frontal stria complete, well impressed, subcariniform, finely crenate, rather evenly arcuate; front very shallowly impressed or not at all, sparsely punctulate.

Pronotum about twice as broad as long, sides nearly straight and moderately convergent on basal two-thirds, thence strongly arcuate and convergent to apical angles; anterior margin broadly, deeply, rather evenly emarginate. Marginal pronotal stria complete on each side, very broadly interrupted at middle (absent behind the head). Lateral pronotal stria complete, crenate, extending around the anterior angle on each side, thence feebly recurving and extending medially, narrowly interrupted on each side behind the eyes, the median detached portion straight and with its ends either posteriorly

recurving or simple. Disk sparsely punctulate throughout, with additional sparse, shallow, elongate, moderately coarse punctures on each lateral fifth within the lateral stria. Antescutellar impression small and shallow or absent.

Elytra together about twice as broad as long, sides very feebly arcuate except at base and apex. Marginal elytral stria deep, coarsely punctate, extending from base to apex. External subhumeral stria well impressed, punctate, very slightly abbreviated at base; internal subhumeral stria present on apical half; oblique humeral very finely impressed, long (present on a little more than basal third). Dorsal striae one to three well impressed, feebly punctate, complete; fourth, fifth, and sutural striae crenate, the fourth abbreviated on a little more than basal third, the fifth present in varying extent (apical third or half); the sutural stria varies from abbreviated on basal fourth to abbreviated on basal third. Elytral disks sparsely punctulate throughout.

Propygidium very coarsely, rather closely punctate, the punctures separated for the most part by less than half their diameters; sparse microscopical punctures intermingled with the coarser ones throughout, a row of moderate punctures present along lateral and apical margins. Pygidium extremely finely and densely, shallowly punctate, the punctures approximate to other coarser (but still fine) sparse punctures intermingled, these denser along the basal margin. Marginal sulcus deep and regular around apex, but deepening and strongly expanding basally to form a deep, tear-shaped excavation on each side.

Prosternum as in generic description, the striae finely subcariniform and not, or very finely, transversely united at base along the margin; external and nearly approximate to the carinal stria on each side at middle is another very fine, subcariniform, short, lateral stria; prosternal keel impunctate. Prosternal lobe with a well-impressed complete marginal stria, surface remotely punctulate, with a very few coarser punctures laterally. Anterior margin of mesosternum very broadly, almost imperceptibly emarginate; marginal stria well impressed, complete, joined posteriorly on each side to an arcuate stria as in *P. miladae* and *P. panamensis*. Meso-metasternal stria broadly, evenly arcuate along almost its entire breadth, the median portion approaching the marginal mesosternal stria; laterally the meso-metasternal stria is joined to the lateral metasternal stria, which extends nearly to the hind coxa.

Anterior tibiae six-denticulate, the basal and apical teeth extremely fine. Middle and posterior tibiae biserially spinulose, the

marginal row of spinules on the hind tibiae three or four in number, these rather widely separated; the submarginal row consists of two or three more closely spaced spinules.

Measurements.—Length 2.4–2.6, width 1.6–1.75 mm.

The following key will serve to separate the species of *Phelisteroides*:

1. Dorsal striae 1–4 complete.....2
- 1a. Dorsal striae 1–3 complete, the fourth at most extending a little beyond the middle.....4
2. Marginal mesosternal stria present at sides only; frontal stria of head complete and joined to the supraorbital stria at the sides.
P. propygidialis Hinton (1935, p. 12); Mexico.
- 2a. Marginal mesosternal stria not interrupted at middle, complete; frontal stria of the head narrowly interrupted on each side, not joined to the supraorbital.....3
3. Pygidium finely, extremely densely punctate, with moderately coarse punctures intermingled, these a little denser basally, elsewhere very sparse; marginal sulcus rather wide and deep, narrowest at apex; lateral pronotal stria interrupted on each side behind the eyes, so that the median portion is detached.
P. panamensis sp. nov.; Panama Canal Zone.
- 3a. Pygidium very finely, extremely densely punctate, with moderately coarse punctures intermingled, these latter rather dense, separated by 1–2 times their diameters; marginal sulcus regular and narrow; lateral pronotal stria not interrupted on each side behind the eyes...*P. miladae* sp. nov.; Colombia.
4. Pronotum impunctate laterally, marginal pronotal stria complete, pygidial sulcus not expanded and deepened basally on each side to form a tear-shaped excavation.....*P. pygidialis* Lewis (1908, p. 157); Paraguay.
- 4a. Pronotum with rather coarse, elongate punctures on each side within the lateral stria, marginal pronotal stria absent behind the head, pygidial sulcus expanded and deepened on each side to form a large, deep, tear-shaped excavation.....*P. fungicolus* sp. nov.; Colombia.

Pseudister mirabilis sp. nov. (pl. XIV, fig. 3)

Type from Puerto Salgar, Colombia. In the collection of Rupert L. Wenzel. Male. Collected July 31, 1938, by Charles H. Seevers from a rubbish heap of *Atta* sp.

Description.—Form oblong-oval; moderately convex. Color dark reddish-brown, shining. Surface finely, deeply, rather sparsely punctate throughout. Frontal stria of head fine, subcariniform, complete and feebly, irregularly arcuate anteriorly, continuous with the supraorbital stria. Front and epistoma somewhat flat. Labrum slightly broader than long, rounded anteriorly.

Pronotum about one-sixth broader than long, sides fairly straight and convergent on basal three-fourths, thence strongly arcuate to apical angles; basal width nearly twice that across apical angles. Marginal stria fine, but well impressed, interrupted behind the head for more than half the width of the head, somewhat sulciform near the median free ends; behind the head the marginal stria is replaced

by a transverse subcariniform stria (isolated apical portion of lateral pronotal stria) whose medial portion is fairly straight and close to the anterior margin of the pronotum, its free ends curving evenly posteriorly and ending laterally and posteriorly to the ends of the marginal stria. Lateral pronotal stria subcariniform, arising at the posterior angle of the pronotum close to the marginal stria and diverging gradually from it as it extends anteriorly; at about the middle its inner margin becomes confluent with a broad, shallow depression on each side; on the antero-medial edge of each depression is a blunt, posteriorly directed tubercle. On either side of the vague antescutellar impression anterior to the third dorsal elytral stria, a feeble impression extends anteriorly and medially about a fifth of the pronotal length before becoming obsolete.

Elytra together nearly one-fourth broader than long, near the middle distinctly broader than pronotum, sides evenly arcuate from base to apex. Epipleura bistriate (marginal epipleural and marginal elytral striae). External subhumeral stria extending from base to apex, narrowly interrupted at middle; internal subhumeral slightly abbreviated at base and apex. Dorsal striae one to five and sutural complete, strongly impressed, crenately punctate on about apical half, nearly impunctate on basal half; fifth dorsal stria united in a rather narrow arch with the sutural; first to fourth dorsals slightly hooked at base; extreme apices of fourth and fifth dorsals slightly abbreviated and confused with coarser punctures which are intermingled with the fine ground punctation.

Propygidium sparsely, moderately coarsely, umbilicately punctate. Pygidium with somewhat large punctures (though not as coarse as those of the propygidium) intermingled with the ground punctation.

Prosternal keel flat, sparsely punctulate; carinal striae subcariniform, closest anterior to middle, thence feebly divergent to apex where they are joined in a narrow arch, strongly divergent posteriorly, united along the posterior margin; lateral and approximate to the carinal stria on each side is a feeble, subcariniform, lateral prosternal stria which extends parallel to the carinal stria for the first third and diverges gradually, ending beyond the middle of the prosternum. Marginal stria of prosternal lobe subcariniform, interrupted at middle, strongly diverging from the margin and extending arcuately and posteriorly to near the base. Mesosternum broadly, feebly emarginate anteriorly, margined by a biarcuate subcariniform stria which terminates on each side at the medio-posterior border

of the middle coxa. Meso-metasternal stria feebly crenate, subcariniform, arcuate, joined on each side to the lateral metasternal stria which extends to the anterior margin of the posterior coxa.

Outer margin of anterior tibiae with seven moderate denticles. Middle and hind tibiae each with a few moderate spinules.

Measurements.—Length 2.0, width 1.5 mm.

Remarks.—This species cannot be related to any described *Pseudister*. The presence of two complete or nearly complete subhumeral, five complete dorsal striae, and a complete sutural stria is only occasionally met with in the family. This complement of elytral striae is elsewhere known to the writers in *Carcinops carinata* (described above), another new species of *Carcinops* to be described elsewhere, *Phelister completus* Schmidt, and a few other species. The paired antero-lateral pronotal impressions and tubercles seem to be unique. The impressions along the basal margin of the pronotum opposite the third dorsal stria are also found in some species of *Phelister*, for example, *P. subplicatus* Schmidt and *P. plicicollis* Schmidt.

Hister foveipygus sp. nov.

Type from Barro Colorado Island, Panama Canal Zone. In the collection of Rupert L. Wenzel. Male. Collected from leaf mold, July 20, 1938, by Eliot C. Williams.

Description.—Form oval, feebly convex, color black, shining. Surface feebly, minutely punctulate throughout. Front feebly impressed; head with supraorbital stria absent along the posterior margin of the vertex, present on each side as a short, longitudinal stria within the eyes which joins the frontal stria, this latter stria bisinuate, straight at middle. Mandibles rather short, blunt, without teeth along the inner margin.

Pronotum a little less than twice as broad as long, sides rather strongly convergent. Lateral pronotal stria complete, curving slightly inward at base on each side; marginal pronotal stria complete along the sides, extending around the apical angle on each side and interrupted behind the head.

Epipleural fossette with a fine, complete, subcariniform stria which continues over the humerus to base. Subhumeral striae absent; oblique humeral stria finely impressed; dorsal striae one and two complete, the third interrupted near apical fourth but continued by an apical appendix; dorsal striae four and five absent; sutural stria short, present from near middle to apical fifth.

Propygidium very coarsely, densely, foveolately punctate in a rather broad transverse area at middle on apical three-fifths, the area shallowly foveolately impressed on each side. Pygidium a little more coarsely punctate than propygidium in a roughly triangular area which approaches a trifol shape on basal two-thirds.

Prosternum and lobe very finely, rather sparsely punctate. Carinal striae widely divergent at base, abbreviated a little beyond the middle; prosternal lobe strongly margined, the stria very narrowly interrupted at middle. Anterior mesosternal margin shallowly, narrowly emarginate; marginal mesosternal stria complete, not joined with the lateral metasternal stria.

Anterior tibiae with the external margin arcuate, without teeth or apical spurs. Middle tibiae feebly, biserially spinulose. Posterior tibiae without spinules along the outer margin.

Measurements.—Length 5.3, width 3.4 mm.

Remarks.—This species belongs to the *coronatus-bullatus* section of the genus and may be separated from all the described species of this group by its non-dentate anterior tibiae and the entire absence of the fourth and fifth dorsal striae. The writers have not seen all the described related species but it is possible that the blunt, non-dentate mandibles are also a character unique to this species. The pronotum, in this section of the genus, does not actually have two lateral pronotal striae as one might assume from the descriptions of Marseul and Lewis; the external pronotal stria of these writers is actually the marginal pronotal stria.

Hister castaneus Lewis

Hister castaneus Lewis, Ann. Mag. Nat. Hist., (5), 15, p. 465, 1885—Nicaragua (Chontales).

Colombia: Puerto Salgar, three specimens, July 29, 1938 (Dybas). Collected from a débris pile outside a nest of *Atta* sp.

Tribe Exosternini

The genus *Phelister* as now constituted contains at least several distinct groups of which one or two may eventually be separated as distinct genera. The genus is predominantly neotropical and is rich in number of species, about 135 having been described.

Phelister dives Marseul

Phelister dives Marseul, Ann. Soc. Ent. France, (4), 1, p. 157, pl. 4, fig. 1, 1861—Brazil (Rio de Janeiro).

Colombia: Villavicencio, five specimens collected from under bark, July 11 and 25, 1938 (Seevers and Dybas).

Phelister williamsi sp. nov. (pl. XVI, figs. 7-9)

Type from Barro Colorado Island, Panama Canal Zone. In the collection of Field Museum of Natural History. Male. Collected from leaf mold, July 14, 1938, by Eliot C. Williams.

Allotype.—Same data as the type. A female in the collection of Rupert L. Wenzel.

Paratypes.—Same locality as the type, forty-nine specimens, collected July 9-20, 1938, by Eliot C. Williams; four each in the collections of Field Museum of Natural History, Edward S. Ross, Henry S. Dybas, and Eliot C. Williams; the remainder are in the collection of Rupert L. Wenzel.

Description.—Form rather roundly oval, distinctly convex. Color black with a feeble tinge of brown, shining. Upper surface very sparsely, distinctly punctulate throughout, the punctures of the pronotum variable, sometimes very deep. Front and epistoma distinctly concave. Supraorbital stria continuous with the fine, complete frontal stria.

Pronotum twice as broad as long, sides nearly straight and feebly convergent on basal two-thirds, arcuate and strongly convergent on apical third. Marginal pronotal stria very fine, extending around the anterior angle on each side and interrupted for nearly the entire width of the anterior pronotal emargination. Lateral pronotal stria present, finely punctate, complete behind the head and with a strong, moderately coarse puncture on each side behind the eye. Antescutellar impression rather large, oval.

Elytra together a little broader than long, at humeri one-eighth broader than pronotum, sides evenly arcuate from base to apex. Marginal epipleural stria absent. Marginal elytral stria well impressed and rather strongly punctate basally, very fine, impunctate, and nearly untraceable apically. External subhumeral stria finely punctate, present on apical half; internal subhumeral stria absent. Dorsal striae one to four rather finely impressed, finely punctate, the first often indistinct on apical half (represented there by a vague impression or row of feeble punctures); dorsal striae two to four extending from base to apical eighth; fifth dorsal stria variable, often represented apically only by a puncture or a short dash, sometimes extending nearly to middle, represented at base by a well-impressed puncture. Sutural stria well impressed, punctate, extending from near apex to a little beyond the middle or to basal third. Propygidium rather coarsely, sparsely punctate on basal half. Pygidium without coarser punctures.

Prosternum rather narrow, the carinal striae subparallel on apical half and joined in a rounded arch anteriorly; basally the striae are strongly divergent and may or may not be united; prosternal lobe with a coarse apical marginal stria.

Mesosternum very feebly produced at middle. Marginal mesosternal stria strongly impressed, complete, not joined to the lateral metasternal stria. Meso-metasternal stria anterior to the meso-metasternal suture for most of its extent, strongly impressed, arcuate but not strongly so, joined on each side to lateral metasternal stria.

Outer margin of anterior tibiae six-denticulate, the basal denticle minute. Middle tibiae with four to six spinules in a single row along outer margin. Hind tibiae with two or three fine spinules on outer edge near apex.

Measurements.—Length 1.6–2.0, width 1.1–1.3 mm.

Remarks.—*P. williamsi* runs to *globiformis* Marseul in Bickhardt's key (1917, p. 211) but is distinguishable from that species by its slightly smaller size, complete frontal stria, complete sutural stria, and the absence of a bent continuation of the fourth dorsal stria across the elytral base toward the scutellum.

***Phelister latus* sp. nov.** (pl. XVI, figs. 13–15)

Type from the Satipo tropical rain forest, Dept. Junín, Peru. In the collection of Rupert L. Wenzel. Sex undetermined. Collected November, 1935, by Felix Woytkowski from a débris pile outside a nest of *Atta* sp.

Paratype.—Same data as the type. In the collection of Edward S. Ross.

Description.—Form broadly oblong, rather feebly convex, distinctly depressed along the suture and pronotal base. Color black, shining. Head sparsely, shallowly punctulate, frontal stria fine, complete; front concave.

Pronotum twice as broad as long, sides rather thick, not abruptly margined, evenly, distinctly arcuate on basal two-thirds, strongly arcuate and convergent on apical third; apical angles rather obtusely rounded. Surface sparsely, distinctly punctulate, with coarser punctures intermingled on the sides. Antescutellar impression distinct. Marginal pronotal stria complete, well impressed along the anterior margin, finely subcariniform along the sides, lateral pronotal stria absent.

Elytra two-sevenths broader than long, nearly one-seventh broader than pronotum; sides feebly arcuate at base, nearly straight

and feebly convergent at middle and beyond, arcuate and strongly convergent near apex. Surface sparsely punctulate. Marginal elytral stria subcariniform, coarsely punctate, extending from base to apex. External subhumeral stria deeply impressed, rather coarsely punctate, present on apical half. Dorsal striae feebly punctate, one to three complete; fourth dorsal extending a little beyond the middle, fifth present on apical half; sutural about equal to the fourth. Along the basal margin is a short transverse stria, extending from the region of the fourth dorsal to the sutural.

Propygidium deeply, rather sparsely punctulate throughout, with moderately coarse, sparse punctures intermingled. Pygidium a little more densely punctulate, with a few coarser punctures intermingled, these not as large as the coarser punctures of the propygidium.

Prosternal carina rather narrow; carinal striae nearly parallel on a little more than apical half and united in a narrow arch at apex, strongly divergent basally and imperfectly united along basal margin by variously connected punctures. A short lateral prosternal stria is present on each side external to the carinal stria on basal half. Apical margin of prosternal lobe with a deeply impressed stria. Mesosternum obtusely, not strongly, produced at middle; marginal stria broadly, strongly arcuate, subcariniform, continued posteriorly behind the middle coxae on the metasternum as an arcuate stria. Meso-metasternal stria subcariniform, distinctly crenate, broadly, rather strongly angulate at middle, extending halfway up the mesosternal disk, continuous on each side with the lateral metasternal stria, the latter rather straight and extending obliquely posteriorly nearly to the posterior coxa. Meso- and metasternal disks sparsely punctulate. First abdominal sternum on each side within the coxa, with a single oblique stria which extends halfway to apex.

Outer margins of anterior tibiae five to six denticulate, the two apical teeth rather large. Outer margins of middle and posterior tibiae with a submarginal row of small spines and a marginal row of six to seven longer spinules.

Measurements.—Length 2.6–2.7, width 2.04–2.1 mm.

Remarks.—This species runs to *pumilus* Erichson in Bickhardt's key (1917, p. 213) but lacks the five basal punctures at the end of the dorsal striae and is otherwise different; in form it resembles *P. amplistrius* Schmidt, but differs from that species in not possessing a subentire external subhumeral stria, in not having the elytral striae deeply crenate, and in having an arcuate marginal mesosternal stria and an angulate meso-metasternal stria.

Phelister parvulus Erichson

Hister parvulus Erichson, Jahrb. Ins., 1, p. 156, 1834.

Phelister acoposternus Marseul, Ann. Soc. Ent. France, (3), 1, p. 475, pl. 14, fig. 8, 1853.

Colombia: Villavicencio, one specimen, July 18, 1938 (Dybas).

Phelister quisquicolus sp. nov. (pl. XVI, figs. 16–18)

Type from Puerto Berrio, Colombia. In the collection of Rupert L. Wenzel. Female. Collected August 5, 1938, by Henry S. Dybas, from a débris pile of *Atta* sp.

Description.—Form oval, moderately convex. Color reddish brown, shining, elytra with a tinge of black. Head moderately sparsely punctulate; supraorbital stria complete, continuous with the frontal stria, the latter rather broadly interrupted at middle, the free ends recurving slightly posteriorly. Front and epistoma not impressed. Anterior margin of labrum distinctly, arcuately emarginate.

Pronotum about twice as broad as long, sides nearly straight on basal two-thirds, strongly arcuate on apical third. Marginal stria well impressed, complete. Surface finely, rather sparsely punctulate, the punctures becoming coarser along the sides. Basal margin along middle two-thirds strongly crenate, the punctures elongate. Antescutellar impression distinct.

Elytra sparsely punctulate, together about four-fifths as long as broad at humeri, one-seventh broader than pronotum, sides evenly arcuate from base to apex. Marginal epipleural stria indistinct. Marginal elytral stria punctate, extending from base to apex, coarse near middle, its outer margin finely cariniform, crenated. External subhumeral stria punctate, distinctly impressed on a little more than apical half, continued to near base by a row of connected punctures, its outer margin very finely cariniform, the inner margin not defined. Dorsal striae well impressed, distinctly punctate and crenate; one to four complete, fifth extending to basal fourth and represented by a coarse puncture at base. Sutural stria complete, approaching the suture apically.

Propygidium sparsely punctulate throughout, with moderate punctures intermingled. Pygidium similarly punctate, the moderate punctures absent apically.

Prosternal keel rather narrow; carinal striae very finely cariniform, rather strongly divergent at base, parallel apically and extending anteriorly to the prosternal lobe; at the point where the carinal

striae diverge posteriorly, a short lateral stria arises on each side and ascends slightly, extending anteriorly a little beyond the middle, parallel to the carinal striae. Anterior margin of mesosternum straight; marginal mesosternal stria crenate, subcariniform, complete, continuing obliquely a short distance behind the middle coxa on the metasternum. Meso-metasternal stria subcariniform, strongly crenate, very feebly arcuate for its entire width, it being anterior to the meso-metasternal suture excepting at each end where it joins the lateral metasternal stria, the latter stria nearly straight and extending posteriorly to near the hind coxa. Meso- and metasternum feebly, microscopically rugulose, sparsely, shallowly punctulate; moderately coarse punctures present laterally on the metasternum within the lateral metasternal striae; external to the lateral metasternal stria the metasternum is coarsely, sparsely punctate. First abdominal sternum with two longitudinal striae on each side medial to the hind coxa.

Outer edge of anterior tibiae arcuate, armed with eight spine-like denticles of which the basal one is minute, the others becoming rather long apically. Middle and posterior tibiae with a submarginal row of seven or eight spines and a marginal row of eight long spines.

Measurements.—Length 2.75, width 1.75 mm.

Remarks.—This species seems to be most closely allied to *P. rubens* Marseul, but differs in having the external subhumeral stria continued to base by row of punctures, in having the sutural stria complete, the fourth and fifth dorsal striae not united at apex, and in the possession of lateral prosternal striae in addition to the carinal striae. Since there is often considerable variation in the extent of the fifth and sutural striae in many species of *Phelister*, these characters may not be valid for separating the two species; however, the presence of distinct lateral prosternal striae could hardly have been overlooked by Marseul. Actually *quisquilocolus* runs to *fulvulus* Marseul in Bickhardt's key (1917, p. 212) but differs from this species also in possessing lateral prosternal striae and in its longer sutural stria and punctate pygidia.

***Phelister purgamenticolus* sp. nov.**

Type from Puerto Berrio, Colombia. In the collection of Rupert L. Wenzel. Female. Collected August 5, 1938, by Henry S. Dybas from a débris pile of *Atta* sp.

Description.—Similar to *P. quisquilocolus* but differs chiefly as follows: Head more sparsely punctate, frontal stria complete; front and epistoma slightly concave. Elytral striae more finely punctate,

subhumeral stria represented only on a little more than apical half, not continued basally by punctures; fifth dorsal stria abbreviated at middle, sutural stria extending to basal third. Propygidium less obviously punctulate, the coarser punctures about twice the size of those of *quisquilocolus*. Prosternum with a few setigerous punctures on basal half; the setae appear to be somewhat squamous as though modified as trichomes; two elongate punctures along the median line bear "tufts" of setae. Mesosternum with somewhat sparse, similar setigerous punctures. Meso- and metasternum not microscopically rugulose. Metasternum with a few somewhat coarser punctures within the lateral striae as in the above species.

Measurements.—Length 2.2, width 1.6 mm.

Remarks.—The presence of setigerous punctures on the pro- and mesosternum of *P. purgamenticolus* immediately distinguishes it from *P. quisquilocolus*.

Phelister recrementicolus sp. nov.

Type from Puerto Salgar, Colombia. In the collection of Field Museum of Natural History. Male. Collected July 31, 1938, by Charles H. Seevers from a rubbish heap of *Atta* sp.

Paratypes.—Same data as the type. Two males, one each in the collections of Rupert L. Wenzel and Edward S. Ross.

Description.—Closely allied to *P. purgamenticolus* but differing as follows: Front and epistoma rather flat (not concave), frontal stria broadly interrupted. Lateral punctures of pronotum finer and very sparse, nearly absent. External subhumeral stria of elytra as in *P. quisquilocolus*. Sutural stria complete or interrupted at basal fourth and represented at base by an arcuate striole. Coarser punctures of propygidium much finer, like those of *quisquilocolus*. Pygidium without any appreciably coarser punctures mingled with the punctulation.

Measurements.—Length 2.1–2.3, width 1.55–1.6 mm.

Remarks.—*P. recrementicolus* may possibly be the male of *purgamenticolus* but the differences between the two are not those usually associated with secondary sexual characters.

Phelister striatinotum sp. nov.

Type from Villavicencio, Colombia. Sex undetermined. In the collection of Rupert L. Wenzel. Collected July 24, 1938, by Henry S. Dybas.

Description.—Form elongate-oval, moderately convex. Color reddish brown, shining. Head rather sparsely punctulate. Epistoma

distinctly concave. Frontal stria complete, subcariniform, well impressed, not connected with the fine, feebly subcariniform supra-orbital stria.

Pronotum about twice as broad as long, sides nearly straight on basal two-thirds, thence arcuate to apical angles. Marginal stria complete, well impressed. Lateral striae absent. Surface rather sparsely punctulate, with coarser, shallow punctures intermingled along the sides. Base of pronotum with a very shallow, transverse area set off by a fine, subcariniform, continuous stria which arches on each side from basal margin opposite the fourth elytral stria to basal fifth and extends transversely with a feeble outward angulation at middle. Punctures along basal margin rather feebly impressed.

Elytra sparsely punctulate (epipleura smooth), together about two-thirds as long as broad, at humeri distinctly broader than pronotum, sides rather evenly arcuate from base to apex. Marginal epipleural stria absent. Marginal elytral stria complete from base to apex, coarse, its outer margin cariniform, crenate along basal third. External subhumeral stria complete, subcariniform, crenate, feebly, inwardly angulate just beyond the middle. Oblique humeral stria indistinct. Dorsal striae one to four complete, fourth arching at base and joining the sutural, which is narrowly interrupted near basal fifth or sixth; fifth dorsal stria extending to basal third; dorsal striae one to four have the outer margins subcariniform, finely crenate, inner margins rather indistinct; the fifth and sutural striae are more distinctly punctate (sutural stria rather strongly crenate) and have both the outer and inner margins distinct, not subcariniform.

Propygidium sparsely punctulate with a few moderate punctures intermingled. Pygidium sparsely punctulate.

Prosternum distinctly, angulately incised at base, keel rather narrow, impunctate; carinal striae finely cariniform, parallel on about apical two-thirds, united anteriorly in a rounded arch, strongly divergent and not united posteriorly. Prosternal lobe sparsely punctulate, apical margin subtruncate, marginal stria well impressed, complete. Mesosternum with the anterior margin acutely produced at middle; marginal mesosternal stria coarsely subcariniform, crenate, broadly arcuate (angulate at middle). Meso-metasternal stria coarsely subcariniform, crenate, angulately arching halfway up the mesosternal disk, connected on each side with the lateral metasternal stria, which is coarsely subcariniform, impunctate, and extends obliquely and posteriorly to the anterior margin of the hind coxa. Behind the middle coxa is a short, arcuate stria. Disks of meso-

and metasternum and first abdominal sternum sparsely punctulate. First abdominal sternum bistrate on each side medial to the hind coxa, the inner stria subsulciform, crenate, extending from basal to apical margin, the outer stria very short, basal.

Outer margin of anterior tibiae arcuate, bearing seven or eight spine-like teeth, of which the middle three are strong, prominent, the others successively shorter; tarsal groove straight. Outer edge of middle tibiae with a marginal row of seven or eight slender spinules (of which the apical six are rather long as in *P. latus*) and a submarginal row of seven to eight very short spinules. Outer edge of posterior tibiae with a marginal row of five to six slender spinules on apical half and one or two short submarginal spinules near apex.

Measurements.—Length 2.53, width 1.83 mm.

Remarks.—This very distinct new species runs to *P. fulvulus* Marseul in Bickhardt's key (1917, p. 212) but may readily be separated from that species by its complete frontal stria, the presence of an antescutellar stria on the pronotum, the strongly incised prosternal base (truncate in *fulvulus*), and the extent of the fourth dorsal and sutural striae. This species is the only *Phelister* yet seen by the writers which has an acute production of the anterior mesosternal margin as in certain other Exosternini. The antescutellar pronotal impression and stria seem to be unique in the genus thus far and recall the structure found in such species of *Epierus* as *E. epulo* Marseul, *E. coproides* Marseul, and *E. schmidtii* sp. nov.

***Phelister flectohumerale* sp. nov.** (pl. XVI, figs. 4-6)

Type from Puerto Berrio, Colombia. In the collection of Field Museum of Natural History. Male. Collected August 5, 1938, by Henry S. Dybas from a rubbish heap of *Atta* sp.

Allotype.—Same data as the type. A female in the collection of Rupert L. Wenzel.

Paratypes.—Seven specimens, same data as the type; one in the collection of Field Museum of Natural History, six in the collection of Rupert L. Wenzel. From Puerto Salgar, Colombia, nine specimens, one each in the collections of Field Museum of Natural History and Edward S. Ross, seven in the collection of Rupert L. Wenzel; collected July 31, 1938, by Henry S. Dybas from a rubbish heap of *Atta* sp.

Description.—Form oval, moderately convex. Color black, shining; surface rather deeply, somewhat sparsely punctulate throughout. Frontal stria of head subcariniform, interrupted at middle, its median free ends incurving; supraorbital stria not con-

nected with the frontal stria; front and epistoma rather strongly concave.

Pronotum nearly twice as broad as long, sides feebly and evenly curved to apical fourth, thence more strongly curved to the anterior angles. Marginal stria fine and complete, lateral stria absent. Coarser (but fine) punctures are intermingled laterally with the punctulation. Antescutellar impression present.

Elytra together about two-thirds as long as broad, at humeri distinctly broader than pronotum, sides arcuate near base and apex, somewhat straight near middle. Internal subhumeral stria absent; external subhumeral represented on apical half of elytra, broad, crenately punctate; anterior to the middle of the elytron it bends sharply inward at right angles for a short distance and becomes fine, subcariniform. Dorsal striae well impressed, punctate, the fourth, fifth, and sutural striae a little more distinctly crenate than the others; dorsals one to four complete, fifth usually abbreviated on a little less than basal half, frequently extending to basal third or fourth, represented by a deep puncture at base; sutural stria usually complete, occasionally abbreviated at about basal sixth.

Propygidium and pygidium rather densely punctulate throughout with moderate punctures intermingled, these distributed rather evenly on the propygidium (though finer medially and apically) and on the pygidium distinctly finer and sparser on the apical half.

Posterior margin of prosternum with a fine, short, transverse stria; keel narrow, the carinal striae subcariniform and subparallel anteriorly (where they unite in a narrow arch); posteriorly they are strongly divergent, broad and shallow, not united. The character of the carinal striae is somewhat variable in the type series, the anterior union varying from acute to rounded (not united at all in one paratype), and the width between the striae is not uniform; in one paratype the stria of one side continues along the posterior margin of the prosternum and nearly joins the other. Marginal stria of prosternal lobe usually complete but narrowly interrupted at middle in a few examples. Mesosternum feebly bisinuate in front, marginal stria subcariniform, continued on each side behind the middle coxa on the metasternum. Meso-metasternal stria subcariniform, irregularly crenate, and produced anteriorly at middle to form a sharp, obtuse angle in some specimens, irregularly rounded in others. Lateral metasternal stria subcariniform, broadly, shallowly punctate, angulately united with the meso-metasternal stria and extending posteriorly and laterally to posterior third of the meta-

sternum where it recurves broadly to extend along the lateral margin of the metasternum to the mesepimeral-metasternal suture. First abdominal sternum with two striae on each side medial to the hind coxa, the outer longitudinal and extending from base to apex, the other curved, short, transverse, extending behind the coxa.

Outer margin of anterior tibiae six-denticulate, the first and sixth denticles minute, the second to fourth strong and prominent, the fifth rather small. Middle tibiae with from six to eight spines on outer margin. Hind tibiae with a few spines on outer margin of apical half, the spines increasing in size apically.

Measurements.—Length 3.0–3.75, width 2.0–2.5 mm.

Remarks.—*P. flectohumerale* runs to *muscipapa* Marseul in Bickhardt's key (1917, p. 213), but differs from that species and all others known to the writers in the nature of the external subhumeral stria, which is bent abruptly inward near the middle of the elytron.

Phelister assimilis sp. nov. (pl. XVI, figs. 10–12)

Type from Puerto Berrio, Colombia. In the collection of Field Museum of Natural History. Male. Collected from cow dung August 5, 1938, by Henry S. Dybas.

Allotype.—Same data as the type. A female in the collection of Rupert L. Wenzel.

Paratypes.—Same data as the type, four specimens in the collection of Rupert L. Wenzel. From Villavicencio, Colombia, two specimens in the collection of Field Museum of Natural History, and one each in the collections of Edward S. Ross and Rupert L. Wenzel. Collected from cow dung July 11, 1938, by Henry S. Dybas.

Description.—Form oval, moderately convex. Color black, shining. Upper surface distinctly, rather sparsely punctulate throughout. Frontal stria of head deeply impressed, present on each side only as a longitudinal interocular stria medial to the eye, not joined to the fine, feebly impressed supraorbital stria. Front and epistoma rather strongly concave.

Pronotum nearly twice as broad as long, sides on basal half fairly straight, thence arcuate and strongly converging to apical angles. Marginal stria well impressed, complete. Lateral stria absent. Antescutellar impression well defined. Pronotum with moderately coarse, rather sparse punctures intermingled with the punctulation in a broad area on each side.

Elytra together about one-eighth broader than long. Marginal elytral stria well marked, complete, rather wide, indistinctly cre-

nately punctate. External subhumeral stria represented on apical two-thirds by a broad well-impressed subcrenately punctate stria; internal subhumeral usually absent, indicated on a few examples by a short, apical impression. Dorsal striae one to four well impressed, crenately punctate, complete; fifth dorsal present on apical half or less, represented by a prominent rounded impression at base; sutural stria variously interrupted within basal third.

Propygidium with rather coarse, moderately sparse punctures intermingled with the punctulation, the punctures becoming finer near apex. Punctation of pygidium basally similar to that of apex of propygidium; apically the pygidium is punctulate only.

Prosternum finely, distinctly, moderately, sparsely punctulate; keel flat, rather broad; carinal striae rather widely separated, subparallel on anterior half (feebly, outwardly arcuate in some specimens), divergent on posterior half, not united at either end. Marginal stria of prosternal lobe well impressed, complete. Mesosternum with punctation similar to that of prosternum; anterior margin feebly produced at middle; marginal stria coarse, subcariniform, feebly crenate, somewhat angulately or arcuately produced at middle, terminating on each side near the middle of the inner margin of the middle coxa. Meso-metasternal stria coarse, subcariniform, strongly crenate, broadly, angulately, or arcuately produced at middle, joined on each side with the lateral metasternal stria which extends posteriorly to the hind coxa; from the junction of the meso-metasternal and lateral striae a fine subcariniform stria extends obliquely on each side to or near the middle coxa, then bends posteriorly and extends around the posterior margin of the coxa as a coarse, subcariniform, crenately punctate stria and becomes obscured in the heavy, coarse punctures of the metasternum near the mesepimeral-metasternal suture. First abdominal sternum with a well-impressed oblique stria on each side medial to the hind coxa, the stria extending to the posterior margin of the sternum.

Outer margin of anterior tibiae bearing six or seven rather slender denticles. Outer edge of middle tibiae with a marginal row of six or seven spinules and a submarginal row of several very short spinules. Hind tibiae with a few smaller spines on apical half of outer margin.

Measurements.—Length 2.4–3.0, width 1.7–2.0 mm.

Remarks.—*P. assimilis* runs to *panamensis* LeConte in Bickhardt's key (1917, p. 214) but differs from that species in having the front of the head rather strongly concave and in having the marginal meso-

sternal and the meso-metasternal striae either arcuate or angulate at middle rather than straight as figured by Lewis (1888, pl. 5, fig. 2); furthermore, the stria which extends obliquely from the junction of the meso-metasternal and lateral metasternal striae is apparently not present in *panamensis*. The original description of the last-named species is not diagnostic for any *Phelister*, and were it not for Lewis' figure of the under side (from a specimen compared with an example sent by LeConte to Marseul) the identity of *panamensis* would remain entirely obscure; it is unfortunate that Lewis did not give further diagnostic characters other than those to be garnered from his illustration.

Phelister egenus Marseul

Phelister egenus Marseul, Ann. Soc. Ent. France, (3), 1, p. 480, pl. 14, fig. 12, 1853—Colombia and Venezuela.

Colombia: Puerto Berrio, seventy specimens, from cow dung, August 5, 1938 (Dybas).

Phelister pusio Erichson

Phelister pusio Erichson, Arch. für Naturg., (1), 13, p. 91, 1847.

Phelister pusio Marseul, Ann. Soc. Ent. France, (3), 1, p. 472, pl. 14, fig. 5, 1853—Brazil (Bahia).

Colombia: Villavicencio, one specimen from cow dung, July 18, 1938 (Dybas).

Phelister quadripunctulus Marseul

Phelister quadripunctulus Marseul, Ann. Soc. Ent. France, (3), 1, p. 471, pl. 14, fig. 4, 1853—Venezuela (Caracas).

Colombia: Villavicencio, twenty specimens collected in horse manure, July 11, 1938 (Dybas).

Phelister cumanensis Marseul

Phelister cumanensis Marseul, Ann. Soc. Ent. France, (3), 1, p. 470, pl. 14, fig. 3, 1853—Venezuela (Caracas).

Colombia: Puerto Berrio, one specimen from cow dung, August 5, 1938 (Dybas).

Phelister chapadae Lewis

Phelister chapadae Lewis, Ann. Mag. Nat. Hist., (7), 5, p. 227, 1900—Brazil.

Colombia: Villavicencio, one specimen, July 25, 1938 (Dybas).

Subfamily Hetaeriinae
Tribe Hetaeriomorphini

Poneraster manni sp. nov.

Type from Tumupasa, Bolivia. No. 54,976 in the collection of the United States National Museum. Male. Collected December, 1921, by William Mann.

Description.—Form oval, strongly convex. Color black, subopaque. Supraorbital stria of head represented by a row of coarse, elongate punctures as in *P. striaticeps* Bruch. Lateral margin of head carinulate on each side from the eye to the anterior margin of the epistoma; front with 15 or 16 fine longitudinal striae, these finely, sparsely punctate.

Pronotum nearly twice as broad as long, sides nearly straight and strongly converging to apical angles which are transversely truncated. Marginal stria extremely fine; a single, finely cariniform lateral pronotal stria, which is close to the marginal, extends on each side from basal margin to around the truncated anterior angle and is broadly interrupted behind the head. Closely placed, parallel, fine, longitudinal striae extend from basal to apical margin, excepting a sparsely, moderately punctate area along basal fourth at middle; the striae are very finely punctulate, the punctures not being large enough to give the striae a crenate appearance.

Elytra together, about one-fourth again as broad as pronotum; sides evenly arcuate, apices transversely truncated. Disks of elytra evenly, rather closely (the punctures separated by about one-half their diameters), moderately coarsely punctate throughout, the punctures finely ocellate, the inner punctures located anteriorly within the larger punctures. Epipleural fossette sharply separated from the rest of the epipleuron and possessing a single fine stria. Elytral striae finely subcariniform; marginal elytral stria strongly angulate near middle, complete. External subhumeral present on basal three-eighths, close to and parallel to the basal portion of the marginal elytral stria; internal subhumeral complete. First dorsal stria extending from basal fourth to apex and recurving inwardly for a short distance along apical margin.

Propygidium slightly more sparsely punctate than the elytra. Pygidium subcircular, its punctation like that of the propygidium, but finer at apex; both the propygidium and pygidium are more shining than remainder of body.

Prosternum as in *P. striaticeps* Bruch, narrow within the striae, the striae joined in front. Mesosternum deeply, moderately,

coarsely, rather closely punctate; anterior margin produced at middle and not margined; marginal stria represented on each side near anterior margin by a scarcely distinguishable impression composed of coarse, disconnected punctures. Meso-metasternal suture not distinct, feebly impressed. Metasternum extremely coarsely punctate, the punctures becoming smaller (though still coarse) laterally. Lateral metasternal stria distinct, subsulciform. First abdominal sternum sparsely, rather finely punctate, the punctures elongate, sublinear.

Anterior tibiae as in *P. striaticeps* Bruch, but with the emargination of the outer edge very feeble and the teeth extremely minute. Middle and posterior tibiae rather broadly expanded, their outer margins angulate at middle (not acutely) and without any indication of teeth or spines.

Measurements.—Length 1.95, width 1.5 mm.

Remarks.—*P. manni* may easily be distinguished from *P. striaticeps* Bruch (1929, p. 426) as follows:

P. manni sp. nov.

Head with 15–16 longitudinally impressed striae.

Sutural stria of elytra absent, indicated by a vague impression.

Mesosternum without a distinct marginal stria.

Teeth of anterior tibiae distinct; middle and posterior tibiae without teeth or spines.

P. striaticeps Bruch

Head with 24–25 striae.

Elytra with a distinct, fine, subcariniform sutural stria.

Marginal mesosternal stria complete, well impressed.

Teeth of anterior tibiae minute; middle and posterior tibiae "fein gezahnt und bebostet."

REFERENCES

BICKHARDT, HEINRICH

1916. Histeridae. Wytzman, Genera insectorum, 166a, pp. 1–112, 15 pls.

1917. Idem, 166b, pp. 113–302.

1918. Neue Histeriden aus dem ungarischen National-Museum und Bemerkungen zu bekannten Arten. Ann. Mus. Hungar. Budapest, 16, pp. 283–297.

BRUCH, CARLOS

1929. Neue myrmecophile Histeriden und Verzeichnis der aus Argentinien bekannten Ameisengäste. Zool. Anz., 83, pp. 421–437, 13 figs.

ERICHSON, WILHELM F.

1834. Uebersicht der Histeroides der Sammlung. Jahrb. der Insektenkunde, 1, pp. 83–208.

1847. Conspectus insectorum Coleopterorum Republica Peruana observata sunt. Arch. für Naturg., (1), 13, pp. 67–185.

FABRICIUS, JOHANN C.

1801. Systema Eleutheratorum, secundum ordines, genera, species; additis synonymis, locis, observationibus et descriptionibus. Kiliae. 2 vols. 1193 pp.

HINTON, HOWARD E.

1935. A Short Review of the North American Species of *Pseudister*. Can. Ent., 67, pp. 11-15, 4 figs.

LEWIS, GEORGE

1885. New Species of Histeridae, with Synonymical Notes. Ann. Mag. Nat. Hist., (5), 15, pp. 456-473.
 1888. Histeridae. Biol. Centr.-Amer., Ins.-Coleop., 2, pt. 1, pp. 182-244, 4 pls.
 1900. On New Species of Histeridae and Notices of Others. Ann. Mag. Nat. Hist., (7), 5, pp. 224-234.
 1908. Idem, (8), 2, pp. 137-162.

MARSEUL, S. A. DE

1853. Essai monographique sur la famille des Histérides. Ann. Soc. Ent. France, (3), 1, pp. 131-294, 447-553, 7 pls.
 1854. Idem, 2, pp. 161-311, 525-592, 670-707, 5 pls.
 1855. Idem, 3, pp. 83-165, 327-506, 677-758, 7 pls.
 1856. Idem, 4, pp. 97-144, 259-283, 549-628, 4 pls.
 1857. Idem, 5, pp. 109-167, 397-516, 2 pls.
 1861. Supplément a la monographie des Histérides. Ann. Soc. Ent. France, (4), 1, pp. 141-184, 509-566, 6 pls.
 1862. Ibid., 2, pp. 1-48, 437-516, 669-720, 5 pls.

SCHMIDT, JOHANN

1896. Aufzählung der von Herrn Professor F. Sahlberg in Brasilien gesammelten Histeriden. Berl. ent. Zeitschr., 41, pp. 55-66.

TARSIA IN CURIA, I.

1935. *Plagiogramma brasiliense* n. gen. n. sp. Nuovo Coleottero isteride del Brasile. Ann. Mus. Zool. Univ. Napoli, n.s., 6, No. 15, 4 pp., 4 figs.

THE LIBRARY OF THE
 MAR 18 1941
 UNIVERSITY OF ILLINOIS